



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/577,921	12/15/2006	Katsura Koyagi	290692US3X PCT	6877

22850	7590	08/18/2010
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P.		
1940 DUKE STREET		
ALEXANDRIA, VA 22314		

EXAMINER	
JOYCE, WILLIAM C	

ART UNIT	PAPER NUMBER
3656	

NOTIFICATION DATE	DELIVERY MODE
08/18/2010	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
oblonpat@oblon.com  
jgardner@oblon.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/577,921	<b>Applicant(s)</b> KOYAGI ET AL.	
	<b>Examiner</b> William C. Joyce	<b>Art Unit</b> 3656	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 June 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

This Office Action is in response to the amendment filed June 3, 2010 for the above identified patent application.

#### ***Claim Objections***

1. Claim 1, line objected to because of the following informalities: in line 9, the period should be changed to a comma. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. Claims 1 and 4, the limitation “wherein the sensor is positioned radially inward of the cylindrical portion of the metal core and axially inward of the flange of the metal core” appears to be inaccurate. Specifically, the Figures illustrate the sensor being positioned axially outward of the flange. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

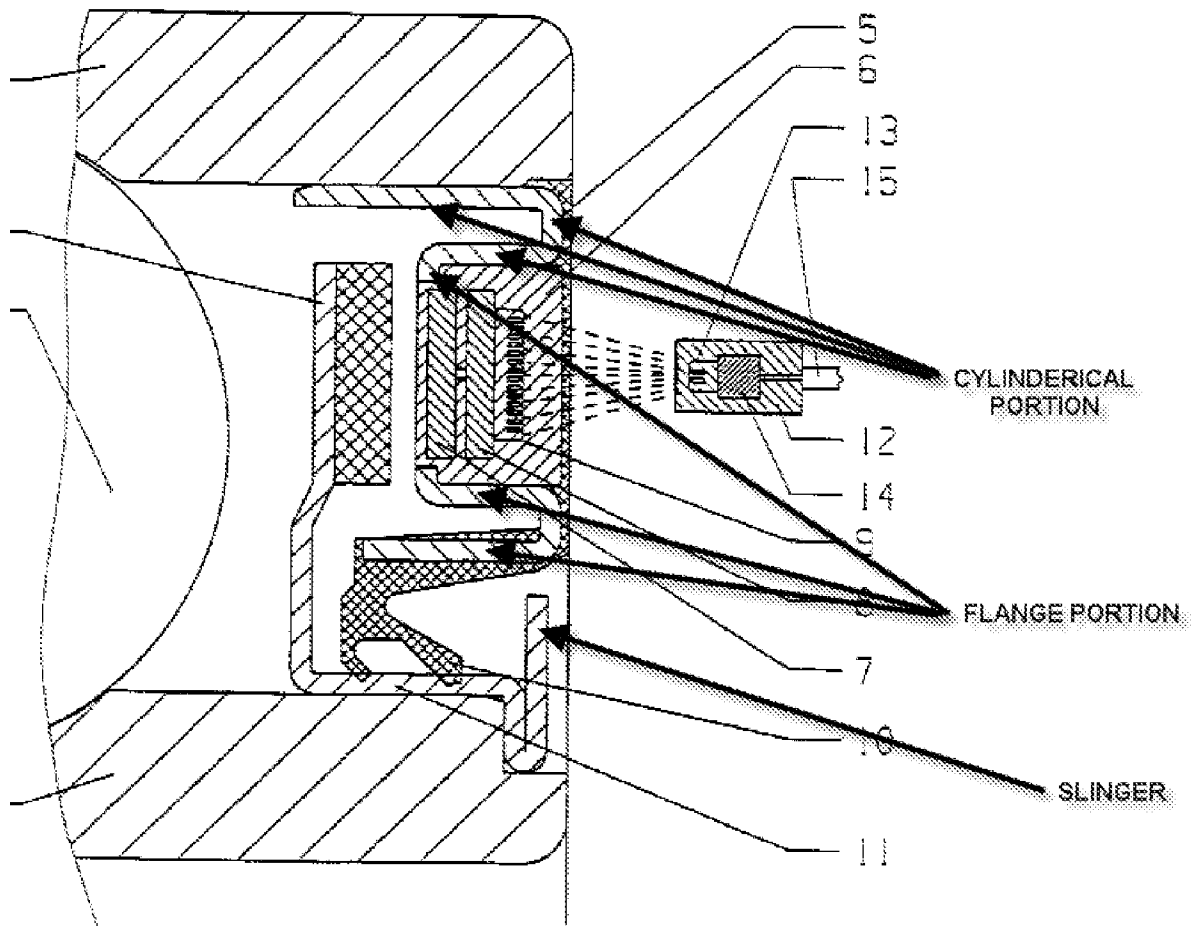
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hofmann et al. (USP 5,898,388).

Hofmann discloses (Fig. 1) a sensor-equipped seal device comprising a fixed-side seal member (5) having a core fixedly fitted to a fixed member (1) and a sensor (7) attached to the core by a molded resin, and a rotation-side seal member (11) having a slinger (see labeled figure below) fixedly fitted to a rotating member (2) and a pulser (4) secured to the slinger, wherein the core of the fixed-side seal member has a cylindrical portion (see labeled figure below) fixedly fitted to the fixed member, and a flange (see labeled figure below) extends from an axially inner end of the cylindrical portion toward the rotation-side seal member, wherein the sensor is positioned radially inward of the cylindrical portion of the metal core and axially outward of the flange of the metal core so that no metal portion exists between the sensor and the pulser, and wherein a labyrinth seal is provided between an outer peripheral edge portion of an outward flange of the slinger of the rotation-side seal member and a resin member formed by the molded resin, the flange being provided with an elastic seal (10) slidable in contact with the rotation-side seal member, the core of the fixed-side seal

Art Unit: 3656

member is provided by molding so that an outer end of the cylindrical portion is positioned within the resin, the rotation-side seal member is provided with a lip support comprising a cylinder fixedly fitted to the slinger and a flange integral with the cylinder and axially outwardly opposed to the pulser from an axially inward position for supporting a lip portion of the elastic seal.



Art Unit: 3656

Hofmann does not clearly disclose the core portion being formed from metal, however it was notoriously known in the art to form a sealing core from metal. Alternatively, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the core portion from metal, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

With respect to claims 8 and 9, Hofmann illustrates the sensor positioned closer to the pulser than is any portion of the metal core of the fixed side seal member.

### ***Response to Arguments***

6. Applicant's arguments filed June 3, 2010 have been fully considered but they are not persuasive.

Applicant argues Hofmann et al. does not disclose the sensor positioned radially inward of the cylindrical portion of the metal core and axially inward of the flange of the metal core. Referring to the figure above, Hofmann et al. teaches the sensor positioned radially inward of the cylindrical portion of the metal core. With respect to the axial positioning of the sensor, please refer to the claim rejection under 35 USC 112, 2nd paragraph.

Again referring to the above figure, Hoffmann et al. illustrates the labyrinth seal being positioned as claimed.

Since Hoffmann et al. teaches each and every claim limitation, the claims stand rejected as described above.

### ***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William C. Joyce whose telephone number is (571) 272-7107. The examiner can normally be reached on Monday - Thursday 7:30-5:00.

Art Unit: 3656

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/William C. Joyce/  
Primary Examiner, Art Unit 3656